

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10|534419  
Source: RCT  
Date Processed by STIC: 05|19|05

***ENTERED***



PCT

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/534,419**

**DATE: 05/19/2005**  
**TIME: 10:35:23**

**Input Set : A:\Xenon 145.txt**  
**Output Set: N:\CRF4\05182005\J534419.raw**

4 <110> APPLICANT: Xenon Genetics Inc.  
 6 <120> TITLE OF INVENTION: HSAN II Related Gene and Expression Products  
 7 and Uses Thereof  
 9 <130> FILE REFERENCE: 760050-145  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/534,419  
 C--> 12 <141> CURRENT FILING DATE: 2005-05-06  
 14 <150> PRIOR APPLICATION NUMBER: US/60/425,601  
 15 <151> PRIOR FILING DATE: 2002-11-12  
 17 <150> PRIOR APPLICATION NUMBER: US/60/502,453  
 18 <151> PRIOR FILING DATE: 2003-09-12  
 20 <160> NUMBER OF SEQ ID NOS: 33  
 22 <170> SOFTWARE: PatentIn version 3.0  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 2786  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Homo sapiens  
 29 <400> SEQUENCE: 1  
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 31 aacccaggag gcggagggtt cagtaagcca agattgtcac tgcactccag cctgggcgaa 120  
 32 agaggaagac tccatctcaa aaaaaagaaa aaagaaaattt catggttatg caactcttat 180  
 33 ttatgatcag aaaaatggac attttgtat ttaactctgt aacatgttgc atgttagtaaa 240  
 34 aatataataa aactattaaat catctagtt gggagagata ggagaaaagac attactgtca 300  
 35 ctagtcaaattatataatctt ttactatcca ccaaaaatctt cttctgattt ctggtagaa 360  
 36 ggcatactat taattgataa gaaaataaaaaa ctgaaggcct ctaacatatac acagggttaat 420  
 37 aagaatataag ggaaagtttag ttcaatagtt taaattaaag cacacttctt acagtagata 480  
 38 actagtcggg cttttatgcc ttgttttagt tcttactctt cctttaactc ttttctgtt 540  
 39 gatgtatattt acattaatgc ttaagagtga acttttaag tggggtaaa aacgaaataa 600  
 40 ttacttacaa agtttaatttcc ttccatttcc ttggagagag gaaagttatg gaaaagcagc 660  
 41 tcttatctaa agcaaagagc ccacagattt atttcattgg ccctggatgt atttaatgg 720  
 42 ttttactat gcacataattt tccagaagca ttgttattttt atttaatattttag 780  
 43 tggtaaccatt tcatagggtt acacagaact acccagttgt gcatgtctga tggtaatttca 840  
 44 catatgaatg tatgaatttac ttgtcttattt catgttgata cagcctcagt ccattggcgca 900  
 45 tccgtgtggg gggaccccaa catacccaga atcacagata tttttcccaa ctattcatga 960  
 46 acgtccagtt tcttttccac caccctccac ctgcccaccg aaagtagccca tttcccagcg 1020  
 47 gcttaagagc acctccctcc tggaaagccca aactoaccac ttccaaacccc tgctgaggac 1080  
 48 tggggccaa agtcttcttc caccctggc cagcccaact aactggacac cagaggccgt 1140  
 49 agttatgtt ggtactacag ccagtagagt aactggagag tcatgtgaga tacaggtcca 1200  
 50 tcctatgtttt gaaccatctc aagtttacag tgactataga cctggacttag tacttccaga 1260  
 51 agaaqctcac tattttatttcc tccaggaagc agtgtatgtt gctggggtagt attaccaggc 1320  
 52 ccgggtggca gaacagtatg agggcattcc atacaactca tcaagtactgtt caagtcctat 1380  
 53 gaaacagata cctgaacaga agccagtaca agggggccctt acttcaagttt ctgtctttga 1440  
 54 atttccatct ggacaggctt tcctggtagg acacccatc aatctaagat tagattctgg 1500  
 55 attgggtccg ggatctcccc tctcttagat ttctgcaccc atcagtagacatgctacac 1560

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56	tttgaatattt	caccctgtct	ttgttcctca	ttctgcgcct	gctgtgttaa	ctcataacaa	1620										
57	tgagagcaga	agcaactgtg	tatttgaatt	tcatgttcac	acaccaagct	cctcttcagg	1680										
58	agaaggaggt	ggaattttac	ctcagcgtgt	ttaccgaaat	cggcaggttg	cagtggactt	1740										
59	gaatcaagaa	gaactgcctc	ctcaatcagt	tggattacat	ggctacttgc	agcctgtgac	1800										
60	tgaagaaaag	cataattacc	atgcccaga	attgaccgtt	tctgtggtag	agcctatcgg	1860										
61	acagaactgg	ccaataggaa	gcccagaata	ttccagtgat	tcctcacaaa	tcacttcttc	1920										
62	agaccccgat	gattttcagt	cacccccc	tacaggggga	gcagctgac	ctttggctc	1980										
63	tgacgtctca	atgccttta	tccatctgcc	tcagacagtg	ttacaagaat	ccccactttt	2040										
64	cttctgtttc	ccccaaaggaa	ccacatctca	gcaggtctta	actgcctcat	tttcttcagg	2100										
65	aggatctgca	cttcatccac	aggttatagg	aaaacttcca	caattatttt	aaactaccct	2160										
66	actttgcacc	ataacattta	aattttctat	tccttatttc	cctgaatcat	ggattttgga	2220										
67	gaaatattgt	ttaattttat	cagtagagtt	tcccatctt	tgggggggtg	tgaactacat	2280										
68	atatgcattt	aaaaacaaaa	tgtgagagaa	gctacctgat	ttacctatta	tatgtgaaaa	2340										
69	ccagtggaaa	aaacacaaaa	actagaattt	tagtattct	tcacaatcac	gacttctatg	2400										
70	cacgttattt	tcaaccagta	gtgaaaatgc	aagtgtatgt	aatgtatggt	tgaccagca	2460										
71	ttattnnaga	atacaatct	taagtattac	tttcttcctc	caaacaagtt	tttaaaaaat	2520										
72	aggataaatt	tttttctat	aaaatataaa	acatggaaaa	taggaaatgc	tgttttgag	2580										
73	gtaatattaa	taatacacag	aattttcatt	agtgtcgaag	gatctaaaaa	gacaaagtat	2640										
74	atcatggaa	taaaaaaaga	tagaaaagga	aacagtttag	gaatttgct	taacaaatga	2700										
75	aaatgcctt	ttaaaatggc	atcagtcaag	caagttgctg	tgcattatta	tatgtccaaa	2760										
76	taaaatgcta	attcataaaaa	ttaagg				2786										
79	<210>	SEQ ID NO:	2														
80	<211>	LENGTH:	434														
81	<212>	TYPE:	PRT														
82	<213>	ORGANISM:	Homo sapiens														
84	<400>	SEQUENCE:	2														
85	Met	Tyr	Glu	Leu	Leu	Val	Leu	Phe	Met	Leu	Ile	Gln	Pro	Gln	Ser	Met	
86	1																15
88	Ala	His	Pro	Cys	Gly	Gly	Thr	Pro	Thr	Tyr	Pro	Glu	Ser	Gln	Ile	Phe	
89																	20
91	Phe	Pro	Thr	Ile	His	Glu	Arg	Pro	Val	Ser	Phe	Ser	Pro	Pro	Pro	Thr	
92																	35
94	Cys	Pro	Pro	Lys	Val	Ala	Ile	Ser	Gln	Arg	Arg	Lys	Ser	Thr	Ser	Phe	
95																	50
97	Leu	Glu	Ala	Gln	Thr	His	His	Phe	Gln	Pro	Leu	Leu	Arg	Thr	Val	Gly	
98																	65
100	Gln	Ser	Leu	Leu	Pro	Pro	Gly	Gly	Ser	Pro	Thr	Asn	Trp	Thr	Pro	Glu	
101																	85
103	Ala	Val	Val	Met	Leu	Gly	Thr	Thr	Ala	Ser	Arg	Val	Thr	Gly	Glu	Ser	
104																	100
106	Cys	Glu	Ile	Gln	Val	His	Pro	Met	Phe	Glu	Pro	Ser	Gln	Val	Tyr	Ser	
107																	115
109	Asp	Tyr	Arg	Pro	Gly	Leu	Val	Leu	Pro	Glu	Glu	Ala	His	Tyr	Phe	Ile	
110																	130
112	Pro	Gln	Glu	Ala	Val	Tyr	Val	Ala	Gly	Val	His	Tyr	Gln	Ala	Arg	Val	
113																	145
115	Ala	Glu	Gln	Tyr	Glu	Gly	Ile	Pro	Tyr	Asn	Ser	Ser	Val	Leu	Ser	Ser	
116																	165
118	Pro	Met	Lys	Gln	Ile	Pro	Glu	Gln	Lys	Pro	Val	Gln	Gly	Pro	Thr		

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119	180	185	190
121	Ser Ser Ser Val Phe Glu Phe Pro Ser Gly Gln Ala Phe Leu Val Gly		
122	195	200	205
124	His Leu Gln Asn Leu Arg Leu Asp Ser Gly Leu Gly Pro Gly Ser Pro		
125	210	215	220
127	Leu Ser Ser Ile Ser Ala Pro Ile Ser Thr Asp Ala Thr Arg Leu Lys		
128	225	230	235
130	Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr His		
131	245	250	255
133	Asn Asn Glu Ser Arg Ser Asn Cys Val Phe Glu Phe His Val His Thr		
134	260	265	270
136	Pro Ser Ser Ser Gly Glu Gly Gly Ile Leu Pro Gln Arg Val		
137	275	280	285
139	Tyr Arg Asn Arg Gln Val Ala Val Asp Leu Asn Gln Glu Glu Leu Pro		
140	290	295	300
142	Pro Gln Ser Val Gly Leu His Gly Tyr Leu Gln Pro Val Thr Glu Glu		
143	305	310	315
145	Lys His Asn Tyr His Ala Pro Glu Leu Thr Val Ser Val Val Glu Pro		
146	325	330	335
148	Ile Gly Gln Asn Trp Pro Ile Gly Ser Pro Glu Tyr Ser Ser Asp Ser		
149	340	345	350
151	Ser Gln Ile Thr Ser Ser Asp Pro Ser Asp Phe Gln Ser Pro Pro Pro		
152	355	360	365
154	Thr Gly Gly Ala Ala Ala Pro Phe Gly Ser Asp Val Ser Met Pro Phe		
155	370	375	380
157	Ile His Leu Pro Gln Thr Val Leu Gln Glu Ser Pro Leu Phe Phe Cys		
158	385	390	395
160	Phe Pro Gln Gly Thr Thr Ser Gln Gln Val Leu Thr Ala Ser Phe Ser		
161	405	410	415
163	Ser Gly Gly Ser Ala Leu His Pro Gln Val Ile Gly Lys Leu Pro Gln		
164	420	425	430
166	Leu Phe		
169	<210> SEQ ID NO: 3		
170	<211> LENGTH: 206		
171	<212> TYPE: PRT		
172	<213> ORGANISM: Homo sapiens		
174	<400> SEQUENCE: 3		
175	Met Tyr Glu Leu Leu Val Leu Phe Met Leu Ile Gln Pro Gln Ser Met		
176	1	5	10
			15
178	Ala His Pro Cys Gly Gly Thr Pro Thr Tyr Pro Glu Ser Gln Ile Phe		
179	20	25	30
181	Phe Pro Thr Ile His Glu Arg Pro Val Ser Phe Ser Pro Pro Pro Thr		
182	35	40	45
184	Cys Pro Pro Lys Val Ala Ile Ser Gln Arg Arg Lys Ser Thr Ser Phe		
185	50	55	60
187	Leu Glu Ala Gln Thr His His Phe Gln Pro Leu Leu Arg Thr Val Gly		
188	65	70	75
			80
190	Gln Ser Leu Leu Pro Pro Gly Gly Ser Pro Thr Asn Trp Thr Pro Glu		
191	85	90	95

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193 Ala Val Val Met Leu Gly Thr Thr Ala Ser Arg Val Thr Gly Glu Ser  
194 100 105 110  
196 Cys Glu Ile Gln Val His Pro Met Phe Glu Pro Ser Gln Val Tyr Ser  
197 115 120 125  
199 Asp Tyr Arg Pro Gly Leu Val Leu Pro Glu Glu Ala His Tyr Phe Ile  
200 130 135 140  
202 Pro Gln Glu Ala Val Tyr Val Ala Gly Val His Tyr Gln Ala Arg Val  
203 145 150 155 160  
205 Ala Glu Gln Tyr Glu Gly Ile Pro Tyr Asn Ser Ser Val Leu Ser Ser  
206 165 170 175  
208 Pro Met Lys Gln Ile Pro Glu Gln Lys Pro Val Gln Gly Gly Pro Thr  
209 180 185 190  
211 Ser Ser Ser Val Phe Asp Phe His Leu Asp Arg Leu Ser Trp  
212 195 200 205  
215 <210> SEQ ID NO: 4  
216 <211> LENGTH: 318  
217 <212> TYPE: PRT  
218 <213> ORGANISM: Homo sapiens  
220 <400> SEQUENCE: 4  
221 Met Tyr Glu Leu Leu Val Leu Phe Met Leu Ile Gln Pro Gln Ser Met  
222 1 5 10 15  
224 Ala His Pro Cys Gly Gly Thr Pro Thr Tyr Pro Glu Ser Gln Ile Phe  
225 20 25 30  
227 Phe Pro Thr Ile His Glu Arg Pro Val Ser Phe Ser Pro Pro Pro Thr  
228 35 40 45  
230 Cys Pro Pro Lys Val Ala Ile Ser Gln Arg Arg Lys Ser Thr Ser Phe  
231 50 55 60  
233 Leu Glu Ala Gln Thr His His Phe Gln Pro Leu Leu Arg Thr Val Gly  
234 65 70 75 80  
236 Gln Ser Leu Leu Pro Pro Gly Gly Ser Pro Thr Asn Trp Thr Pro Glu  
237 85 90 95  
239 Ala Val Val Met Leu Gly Thr Thr Ala Ser Arg Val Thr Gly Glu Ser  
240 100 105 110  
242 Cys Glu Ile Gln Val His Pro Met Phe Glu Pro Ser Gln Val Tyr Ser  
243 115 120 125  
245 Asp Tyr Arg Pro Gly Leu Val Leu Pro Glu Glu Ala His Tyr Phe Ile  
246 130 135 140  
248 Pro Gln Glu Ala Val Tyr Val Ala Gly Val His Tyr Gln Ala Arg Val  
249 145 150 155 160  
251 Ala Glu Gln Tyr Glu Gly Ile Pro Tyr Asn Ser Ser Val Leu Ser Ser  
252 165 170 175  
254 Pro Met Lys Gln Ile Pro Glu Gln Lys Pro Val Gln Gly Gly Pro Thr  
255 180 185 190  
257 Ser Ser Ser Val Phe Glu Phe Pro Ser Gly Gln Ala Phe Leu Val Gly  
258 195 200 205  
260 His Leu Gln Asn Leu Arg Leu Asp Ser Gly Leu Gly Pro Gly Ser Pro  
261 210 215 220  
263 Leu Ser Ser Ile Ser Ala Pro Ile Ser Thr Asp Ala Thr Arg Leu Lys  
264 225 230 235 240

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266 Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr His  
267 245 250 255  
269 Asn Asn Glu Ser Arg Ser Asn Cys Val Phe Glu Phe His Val His Thr  
270 260 265 270  
272 Pro Ser Ser Ser Gly Glu Gly Gly Ile Leu Pro Gln Arg Val  
273 275 280 285  
275 Tyr Arg Asn Arg Gln Val Ala Val Asp Leu Asn Gln Glu Glu Leu Pro  
276 290 295 300  
278 Pro Gln Ile Ser Trp Ile Thr Trp Leu Leu Ala Ala Cys Asp  
279 305 310 315  
282 <210> SEQ ID NO: 5  
283 <211> LENGTH: 314  
284 <212> TYPE: PRT  
285 <213> ORGANISM: Homo sapiens  
287 <400> SEQUENCE: 5  
288 Met Tyr Glu Leu Leu Val Leu Phe Met Leu Ile Gln Pro Gln Ser Met  
289 1 5 10 15  
291 Ala His Pro Cys Gly Gly Thr Pro Thr Tyr Pro Glu Ser Gln Ile Phe  
292 20 25 30  
294 Phe Pro Thr Ile His Glu Arg Pro Val Ser Phe Ser Pro Pro Pro Thr  
295 35 40 45  
297 Cys Pro Pro Lys Val Ala Ile Ser Gln Arg Arg Lys Ser Thr Ser Phe  
298 50 55 60  
300 Leu Glu Ala Gln Thr His His Phe Gln Pro Leu Leu Arg Thr Val Gly  
301 65 70 75 80  
303 Gln Ser Leu Leu Pro Pro Gly Gly Ser Pro Thr Asn Trp Thr Pro Glu  
304 85 90 95  
306 Ala Val Val Met Leu Gly Thr Thr Ala Ser Arg Val Thr Gly Glu Ser  
307 100 105 110  
309 Cys Glu Ile Gln Val His Pro Met Phe Glu Pro Ser Gln Val Tyr Ser  
310 115 120 125  
312 Asp Tyr Arg Pro Gly Leu Val Leu Pro Glu Glu Ala His Tyr Phe Ile  
313 130 135 140  
315 Pro Gln Glu Ala Val Tyr Val Ala Gly Val His Tyr Gln Ala Arg Val  
316 145 150 155 160  
318 Ala Glu Gln Tyr Glu Gly Ile Pro Tyr Asn Ser Ser Val Leu Ser Ser  
319 165 170 175  
321 Pro Met Lys Gln Ile Pro Glu Gln Lys Pro Val Gln Gly Pro Thr  
322 180 185 190  
324 Ser Ser Ser Val Phe Glu Phe Pro Ser Gly Gln Ala Phe Leu Val Gly  
325 195 200 205  
327 His Leu Gln Asn Leu Arg Leu Asp Ser Gly Leu Gly Pro Gly Ser Pro  
328 210 215 220  
330 Leu Ser Ser Ile Ser Ala Pro Ile Ser Thr Asp Ala Thr Arg Leu Lys  
331 225 230 235 240  
333 Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr His  
334 245 250 255  
336 Asn Asn Glu Ser Arg Ser Asn Cys Val Phe Glu Phe His Val His Thr  
337 260 265 270

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/19/2005  
PATENT APPLICATION: US/10/534,419 TIME: 10:35:24

Input Set : A:\Xenon 145.txt  
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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; Xaa Pos. 326,327,328,329,330,331,332,333,334,335,336,337,338,339  
Seq#:13; Xaa Pos. 340,341,342,343,344,345,346,347,348,349,350,351,352,353  
Seq#:13; Xaa Pos. 354,355,356,357,358,359,360,361,362,363,364,365,366,367  
Seq#:13; Xaa Pos. 368,369,370,371,372,373,374,375,376,377,378,379,380,381  
Seq#:13; Xaa Pos. 382,383,384,385,386,387,388,389,390,391,392,393,394,395  
Seq#:13; Xaa Pos. 396,397

### Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:24,25,26,27,28,29,30,31,32,33

**VERIFICATION SUMMARY**

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L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1116 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:320

M:341 Repeated in SeqNo=13